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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,850	11/07/2005	John Joseph Ciardi	PU030150	2745
24498 7590 11/02/2010 Robert D. Shedd, Patent Operations THOMSON Licensing LLC P.O. Box 5312 Princeton, NJ 08543-5312				
EXAMINER				
AGHDAM, FRESHTEH N				
ART UNIT		PAPER NUMBER		
2611				
MAIL DATE		DELIVERY MODE		
11/02/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/555,850

**Applicant(s)**

CIARDI, JOHN JOSEPH

**Examiner**

FRESHTEN N. AGHDAM

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed August 3, 2010 have been fully considered but they are not persuasive.

#### **Applicant's Argument:**

Regarding claims 1 and 7-8, pages 5-6, the Applicant argues that the claimed subject matter is not taught or suggested by Asai "detecting a valid synchronization sequence while measuring a predetermined symbol interval relative to a reference clock".

#### **Examiner's Response:**

Regarding the argument set forth above, Examiner disagrees with the Applicant because Asai teaches this limitation (col. 7, lines 1-22 ad 40-65).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai et al. (US 6,222,980).

As to claims 1 and 8, Asai teaches a method of and/or an apparatus for decoding a LTC frame of type used in connection with film and television and accompanying audio, comprising the steps of: detecting a valid synchronization sequence within an incoming LTC frame while measuring a predetermined symbol interval to a reference clock (abstract; fig. 4, block 12); determining a LTC frame direction (abstract, block 15A); decoding payload information from the LTC frame (block 11); transferring the payload information in an order determined by the LTC frame direction (blocks 11, 15A, and 15; col. 7, lines 23-32; col. 10, lines 27-33).

As to claim 7, Asai further inherently teaches repeating the recited steps for each successive LTC frame (col 4, lines 55-64).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asai et al.

As to claims 2-3, 9, 11-12, and 15, Asai further teaches extracting successive symbols (bits) from the LTC frame using the reference clock (fig. 4, block 12).

One of ordinary skill in the art would recognize that it is well known in the art, obvious, and/or a matter of design requirement to use a 27 MHz reference clock signal in order to, for example, comply with ISO-13818-1 2.4.2.1.

Therefore, it would have been obvious to one of ordinary skill in the art to use a local clock with a specific frequency for the purpose of frame extraction.

As to claim 4, one of ordinary skill in the art further recognize that it is a matter of design requirement for a minimum required symbol interval when the reference clock frequency is at 27 MHz to be seventy.

Therefore, it would have been obvious to one of ordinary skill in the art to set the minimum required symbol interval at seventy to meet the design requirement.

As to claim 5, one of ordinary skill in the art further recognize that it is a matter of design requirement for a maximum allowable symbol interval when the reference clock frequency is at 27 MHz to be 210,497.

Therefore, it would have been obvious to one of ordinary skill in the art to set the maximum allowable symbol interval at 210,497 to meet the design requirement.

As to claim 6, one of ordinary skill in the art would further recognize that it is a matter of design choice, obvious, and/or well known in the art to use a filter to filter each incoming LTC frame in order to remove glitches, and consequently, improve the decoding process of Asai.

Therefore, it would have been obvious to one of ordinary skill in the art to remove glitches using a filter for the reason stated above.

As to claim 10, one of ordinary skill in the art would further recognize that it is a well known in the art and/or a matter of design choice to use a counter to facilitate edge detection.

Therefore, it would have been obvious to one of ordinary skill in the art to use a counter to count sync pulses (e.g. to detect the leading edge of sync pulses).

As to claim 11, Asai further teaches determining whether or not the 80 bits in the memory have been accessed (col. 10, lines 27-33).

One of ordinary skill in the art would recognize that it is well known in the art and/or obvious to make such a determination using a counter.

Therefore, it would have been obvious to one of ordinary skill in the art to utilize a counter in order to determine whether or not the 80 bits have been accessed.

As to claim 12, one of ordinary skill in the art would further recognize that it is a matter of design choice and/or well known in the art to use a state machine for the purpose of transferring the payload information in an order determined by the LTC frame direction.

Therefore, it would have been obvious to one of ordinary skill in the art to utilize a state machine for the reason stated above.

As to claim 13, Asai teaches a method of and/or an apparatus for decoding a LTC frame of type used in connection with film and television and accompanying audio, comprising the steps of: detecting a valid synchronization sequence within an incoming LTC frame while measuring a predetermined symbol interval to a reference clock (abstract; fig. 4, block 12); determining a LTC frame direction (abstract, block 15A);

decoding payload information from the LTC frame (block 11); transferring the payload information in an order determined by the LTC frame direction (blocks 11, 15A, and 15; col. 7, lines 23-32; col. 10, lines 27-33).

Asai further teaches determining whether or not the 80 bits in the memory have been accessed (col. 10, lines 27-33).

One of ordinary skill in the art would recognize that it is well known in the art and/or obvious to make such a determination using a counter.

Therefore, it would have been obvious to one of ordinary skill in the art to utilize a counter in order to determine whether or not the 80 bits have been accessed.

One of ordinary skill in the art would further recognize that it is a well known in the art and/or a matter of design choice to use a counter to facilitate edge detection.

Therefore, it would have been obvious to one of ordinary skill in the art to use a counter to count sync pulses (e.g. to detect the leading edge of sync pulses).

One of ordinary skill in the art would further recognize that it is a matter of design choice and/or well known in the art to use a state machine for the purpose of transferring the payload information in an order determined by the LTC frame direction.

Therefore, it would have been obvious to one of ordinary skill in the art to utilize a state machine for the reason stated above.

As to claim 14, one of ordinary skill in the art would further recognize that it is a matter of design choice, obvious, and/or well known in the art to use a filter to filter each incoming LTC frame in order to remove glitches, and consequently, improve the decoding process of Asai.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. N. A./

Examiner, Art Unit 2611

/CHIEH M FAN/

Supervisory Patent Examiner, Art Unit 2611